

A retrospective comparison of systematic reviews with same-topic rapid reviews

Summary

While systematic reviews are a comprehensive form of data synthesis, they represent a significant investment in time and resources. Rapid reviews have arisen as a timelier alternative. We retrospectively compared rapid reviews to same-topic systematic reviews. Overall, we found that rapid reviews used several methodological shortcuts, engaged fewer experts, included fewer studies, had shorter and lower quality reports, and were completed over a shorter timeframe compared to same-topic systematic reviews. Comparisons between rapid reviews and same-topic systematic reviews were challenging due to substantial underreporting of methods. This demonstrated that rapid reviews are not easily compared to systematic reviews using retrospectively.

Implications

A prospective design comparing rapid reviews and systematic reviews concurrently may allow for a more complete comparison of review methods for addressing questions regarding a rapid review's validity, efficiency, and general suitability as an alternative to a systematic review.

Reference:

Reynen E, Robson R, Ivory J, et al. A retrospective comparison of systematic reviews with same-topic rapid reviews. *J Clin Epidemiol*. 2017 Dec 16. pii: S0895-4356(17)30547-4.

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What is the current situation?

- Systematic reviews are a comprehensive form of data synthesis, but represent a significant investment in time and resources. Rapid reviews may be a timelier alternative. An approach to comparing rapid review and systematic reviews is needed.

What is the objective?

- To retrospectively compare methods, included studies and conclusions of rapid reviews to same-topic systematic reviews.

How was the review conducted?

- A retrospective comparison of studies comparing rapid reviews and systematic reviews was undertaken through a retrospective study.
- Studies were included if literature searches were conducted within 24 months of each other and had common research questions. Reviews methods, population, intervention, outcomes, quality (using the AMSTAR) and conclusions were compared.
- Two reviewers independently performed study selection, data abstraction and quality appraisal. Discrepancies were resolved by a third reviewer.
- Results are reported descriptively. Number (%) were reported and compared between systematic reviews and rapid reviews.

What did the review find?

- Six studies containing 16 review pairs covering nine topics were included.
- Rapid reviews used several methodological shortcuts, engaged fewer experts, included fewer studies, had shorter and lower quality reports, and were completed in a shorter time frame compared to systematic reviews. Rapid reviews reported contacting authors more frequently.
- Rapid reviews limited the search language to English more often, were less likely to use two reviewers to select studies or abstract data, searched grey literature less often and included fewer studies than systematic reviews.
- Rapid review conclusions were generally similar to those for systematic reviews. Two rapid reviews did not include important results reported by the systematic reviews, which may have been because of missed studies.
- Some systematic reviews did not completely report methods and one reached a different conclusion compared to the rapid reviews. Systematic reviews generally provided more nuanced conclusions and tended to be slightly more conservative than rapid reviews. Overall, systematic reviews were of higher methodological quality than rapid reviews.